IV. AMENDMENTS TO THE CLAIMS

1. (ORIGINAL) An antenna device of an interrogator which constitutes an automatic identification system by exchanging information with an IC tag attached to an object to be identified by electromagnetic coupling, comprising:

an antenna element; and

a capacitor which is connected in series to said antenna element and having a variable capacitance to maintain a predetermined resonance frequency.

2. (ORIGINAL) The antenna device according to claim 1, wherein said capacitance of said capacitor is made variable by switching a switch.

3. (ORIGINAL) An antenna device of an interrogator which constitutes an automatic identification system by exchanging information with an IC tag attached to an object to be identified by electromagnetic coupling, comprising:

an antenna coil having taps which are switched from one to another to maintain a predetermined resonance frequency.

4. (ORIGINAL) An antenna device of an interrogator which constitutes an automatic identification system by exchanging information with an IC tag attached to an object to be identified by electromagnetic coupling, comprising:

an antenna coil; and

an inductor which is connected in series to said antenna coil and having taps which are switched from one to another to maintain a predetermined resonance frequency.

5. (CURRENTLY AMENDED) The antenna device according to claim 3 [or 4], wherein said taps are converted by switching a switch.

6. (PREVIOUSLY PRESENTED) The antenna device according to claim 2, wherein said switch is a semiconductor switch which is controlled by a control circuit for detecting a deviation of said resonance frequency and controlling

said resonance frequency to a predetermined frequency.

7. (ORIGINAL) An antenna device of an interrogator which constitutes an automatic identification system by exchanging information with an IC tag attached to an object to be identified by electromagnetic coupling, comprising:

an antenna coil; and

a variable inductor, connected in series to said antenna coil, for maintaining a predetermined resonance frequency.

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8. (ORIGINAL) The antenna device according to claim 7, wherein said variable inductor is controlled by a control circuit for detecting a deviation of resonance frequency and controlling resonance frequency to a predetermined frequency.

9. (ORIGINAL) The antenna device according to claim 1, wherein a predetermined communication distance is ensured by varying a drive voltage of said antenna device.

10. (PREVIOUSLY PRESENTED) The antenna device according to claim 5, wherein said switch is a semiconductor switch which is controlled by a control circuit for detecting a deviation of said resonance frequency and controlling said resonance frequency to a predetermined frequency.

11. (NEW) The antenna device according to claim 3, wherein a predetermined communication distance is ensured by varying a drive voltage of said antenna device.